

METHOD AND APPARATUS FOR PLASMA OPTIMIZATION IN WAFER PROCESSING

ABSTRACT OF THE DISCLOSURE

5 An apparatus for managing plasma in wafer processing operations is disclosed
which includes a housing having an internal region defined by an inner wall. The housing
has an input port for supplying a plasma into the housing at a first end and an output port
at a second end. The apparatus includes a hollow tube contained in the internal region
within the housing. The hollow tube is defined by a wall that extends between the first
10 end and the second end and contains a plurality of orifices generating a plurality of fluid
paths through the wall. A fluid input is included supplying fluid into the internal region of
the housing. The supplied fluid is capable of passing through the plurality of orifices, and the
plasma supplied through the input port is capable of being mixed within the hollow tube with
the supplied fluid. The output port at the second end of the housing enables the mixed
15 plasma and fluid supply to exit the housing.